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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,231	07/24/2001	Jian-Bing Fan	A-68929-6/DJB/RMS/DCF	5874

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EXAMINER

LU, FRANK WEI MIN

ART UNIT PAPER NUMBER

1634

DATE MAILED: 01/15/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/915,231

Applicant(s)

FAN ET AL.

Examiner

Frank W Lu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 3-10, 12, 13, 22, 23, 32 and 34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 11, 14-21, 24-31 and 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>8</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restriction

1. Applicant's election of species (1) drawn to proteins (claims 2, 11-18, 30, and 32), species (c) drawn to the aptamer (claims 14), and species (2) drawn to a substrate comprising microspheres (claims 24-26) in Paper No. 10 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 1,2, 11, 14-21, 24-31, and 33 will be examined.

Specification

2. The disclosure is objected to because of the following informalities: (1) although there is a item 30 in Figure 7, there is no description of item 30 in The Brief Description of the Drawing 7; (2) although The Brief Descriptions of the Drawings 8-10 describe "detection position 10", there is no item 10 in Figures 8-10; and (3) although The Brief Description of the Drawing 10 describes "upstream universal priming site 25", there is no item 25 in Figure 10.

Appropriate correction is required.

Claim Objections

3. Claims 1 and 29 are objected to because of the following informalities: No period should appear after the label of each method step, e.g., "a." should be --a)--.

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4. Claim 1 is objected to because of the following informalities: (1) “a first and second bioactive agent” should be “a first and a second bioactive agent”; and (2) “ a first and second adapter sequence” should be “a first and a second adapter sequence”.

5. Claims 17 is objected to because of the following informalities: Note that the phrase “SPIA” is abbreviation. It can only be used after the phrase appears once.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 2, 11, 14-21, 24-31, and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Note that claims 2, 11, 14-21, and 24-28 are dependent on claim 1 while claims 30 and 32 are dependent on claim 29.

8. Claim 1 is rejected as vague and indefinite in view of step a) because it is unclear what it intended. According to step (a), since the first and second bioactive agents specifically bind to said first and second target molecules, it is unclear how to identify said first and second target molecules using the first and second adapters since the claim does not describe whether the first and second adapters can interact with first and second target molecules or whether the first and second adapters can interact with the first and second bioactive agents. On other words, the claim

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do not describe how to identify the first and the second target molecules using the first adapter and the second adapter. Please clarify.

9. Claim 1 is rejected as vague and indefinite because it is unclear because the goal of the claim (see preamble) does not correspond to its method steps. Note that steps b) and c) are used to detect the first and second adapters and are not used to detect the first and second target molecules. The claim do not describe how to identify the first and the second target molecules using the first adapter and the second adapter. Please clarify.

10. Claims 1 and 29 are rejected as vague and indefinite in view of step (c) because it is unclear what it intended since the detection said plurality of amplicons will not indicate the absence of said target molecules in said sample. Please clarify.

11. Claim 29 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps is: separating said bioactive agents and said adapter sequences that bind to said plurality of target molecule from unbound said bioactive agents and unbound said adapter sequences since, if said plurality of amplicons are amplified from unbound said adapter sequences, the detection said plurality of amplicons will not necessary to indicate the presence of said target molecules in said sample. Please clarify.

Conclusion

12. No claim is allowed.

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13. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CAR § 1.6(d)). The CM Fax Center number is either (703) 308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Lu, Ph.D., whose telephone number is (703) 305-1270. The examiner can normally be reached on Monday-Friday from 9 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones, can be reached on (703) 308-1152.

Any inquiry of a general nature or relating to the status of this application should be directed to the patent Analyst of the Art Unit, Ms. Chantae Dessau, whose telephone number is (703) 605-1237.

Frank Lu
January 13, 2003


Ethan Whisenant, Ph.D.
Primary Examiner (FSA)